

## **REMARKS**

### **I. Status of the Application**

Claims 1-11 were pending as of the date of the Office Action. In the Office Action, the Examiner:

(a) objected to claims 1-11 for a particular language informality in claim 1;

(b) rejected claims 1, 2 and 11 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 3,950,581 to Maurin ("Maurin") in view of U.S. Patent No. 6,694,682 to Fanti ("Fanti '682");

(c) rejected claim 8 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Maurin and Fanti and in further view of U.S. Patent No. 5,080,944 to Kauffman et al. ("Kauffman"); and

(d) objected to claims 3-7, 9 and 10 as being dependent upon a rejected base claim.

In this response, Applicant respectfully amends claims 1, 3 and 9. Claims 2, 4-8, 10 and 11 also remain in the Application but are not amended. Applicant appreciates the Examiner's recognition that claims 3-7, 9 and 10 would be allowable if rewritten in independent form. Applicant respectfully submits that the foregoing amendments and following remarks incorporated herein traverse or overcome the Examiner's rejections of and objections to the Application.

### **II. No New Matter Is Introduced by Way of Amendment**

Applicant respectfully submits that no new matter has been added by amending claims 1, 3 and 9. Specifically, the amendment to claim 1 was made to properly correct a language

informality as suggested by the Examiner. Applicant amended claims 3 and 9 to incorporate the limitations of original claims 1 and 2. Applicant respectfully submits that the amendments are supported by the originally filed Application and do not add new matter. Accordingly, Applicant requests that the amendments be entered and that the Application proceed to allowance.

**III. The Objection of Claims 1-11 for Having a Particular Language Informality is Overcome and Should be Withdrawn.**

In the Office Action, the Examiner objected to claims 1-11 for a particular language informality in claim 1. The Examiner recommended that Applicant correct the informality by replacing the word "said" and with the word "the" in claim 1. Applicant respectfully agrees with the Examiner, and has amended claim 1 in the manner recommended by the Examiner. Accordingly, Applicant respectfully submits that the Examiner's objection to claims 1-11 is overcome and should be withdrawn.

**IV. The Rejection of Claims 1, 2 and 11 under 35 U.S.C. § 103(a) as Allegedly Being Unpatentable Over Maurin in view of Fanti '682 is Overcome and Should be Withdrawn.**

In the Office Action, the Examiner rejected claims 1, 2 and 11 under 35 U.S.C. § 103(a) as allegedly being obvious over Maurin in view of Fanti '682. As is explained in greater detail herein, Applicant respectfully submits that the rejection of claims 1, 2 and 11 is overcome and should be withdrawn because there is no motivation or suggestion to combine the teachings of Maurin and Fanti '081 (see below).

Three criteria must be met to establish a *prima facie* case of obviousness: (i) *there must be some suggestion or motivation to combine the teachings of two or more prior art references*; (ii) there must be a reasonable expectation of success; and (iii) "all of the claim

limitations must be taught or suggested by the prior art." MPEP §§ 2143 and 2143.03 (citing *In re Royka*, 490 F.2d 981 (C.C.P.A. 1974)). "It is insufficient to establish obviousness that the separate elements of the invention existed in the prior art, absent some teaching or suggestion, in the prior art, to combine the elements." *Arkie Lures, Inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 957 (Fed. Cir. 1997). The fact that prior art references can be modified or combined is insufficient to meet this criterion – those references must also suggest the desirability of the combination. MPEP § 2143.01 (citing *In re Mills*, 916 F.2d 680, 682 (Fed. Cir. 1990); *see also In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998)). Moreover, the fact that the modification or combination would be well within the ordinary skill in the art, by itself, is insufficient to meet this criterion. *Al-Site Corp. v. VSI Intern., Inc.*, 174 F.3d 1308, 1324 (Fed. Cir. 1999); *Ex parte Levengood*, 28 U.S.P.Q.2d 1300, 1302 (Bd. Pat. App. & Inter. 1993).

Applicant respectfully submits that it appears that the Examiner inadvertently referred to "Fanti '682" in his rejection (Office Action, page 2) instead of U.S. Patent No. 5,834,081 to Fanti ("Fanti '081"). Applicant believes this to be the case because (1) the Examiner's citations of "column 1, line 62 – column 2, line 25" and "[c]olumn 1, lines 21-36, column 2, line 52 – column 3, line 8" (Office Action, p.3) appear to be in reference to language in Fanti '081 and not to language in Fanti '682, and (2) Fanti '682 is the parent patent of the present Application. Accordingly, Applicant will respond to this rejection under the assumption that the Examiner rejected claims 1, 2 and 11 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Maurin in view of Fanti '081. With that understanding, Applicant respectfully submits the following.

### The Invention of Maurin

Maurin discloses, teaches and suggests a prefabricated panel that is prepared by placing tiles 2 that have been previously glued to a cardboard sheet 3 into the lower part of a mold 1, wherein spaces 4 are specifically present between the tiles. (Fig. 2 and column 3, lines 56-58). The tiles used may be manufactured from materials such as earthenware, ceramic, glass, aluminum, stainless steel and glazed ceramic. (Column 3, lines 42-46). Maurin then teaches the addition of a layer 6 of thermo-self-adhesive joining material onto the tiles, not only to fill in the spaces between the tiles but also to form a peripheral joint. (Figs. 1 and 2 and column 3, lines 58-60). A support plate 7 is then placed on top of the layer of thermo-self-adhesive joining material, and a lid 8 is used to close the mold with a portion 9 of the lid forming a piston with screws 10 allowing for pressure to be exerted on the support. (Fig. 2 and column 3, lines 60-64). In one example, the sealed mold was "heated for 18 minutes by a circulation of oil at a temperature of 180°C", and subsequently the tile was removed from the mold once it had cooled. (Column 4, lines 35-37).

### The Invention of Fanti '081

Fanti '081 discloses, teaches and suggests a plastics tile 9 that comprises pieces 10, 11, and 12, each piece comprising a top translucent PVC wear layer 14, a printed thin PVC film layer 15, a white layer 16, and a black PVC backing layer 17. (Figs. 1 and 2 and column 2, lines 46-58). The layers of the individual pieces are heat bonded under pressure to produce a laminated sheet that is about 2.5 mm thick. (Column 2, lines 58-61). The pieces are then assembled "by abutting the edges of the pieces over lower regions thereof to make a precursor

tile...held in a dielectric heating welding machine" that maintains the correct dielectric heating of the layers to be welded. (Fig. 3 and column 3, lines 18-35). An electrode 19 is then lowered into contact with the assembled pieces to melt and thereby fuse, or weld the lower layers 15, 16, and 17, to form a unitary tile. (Figs. 3 and 4 and column 4, lines 3-8).

#### Applicant's Invention

Claim 1 of the Application discloses a method of manufacturing a plastics floor tile that comprises, in relevant part, cutting a plurality of discrete plastics components, assembling the components together to form at least a portion of the desired shape and design, and securing the components by the application of at least one portion of a joining film to the lower surface of the assembled components so that the joining film spans at least the neighboring edges of the adjacent components. (Claim 1 and paragraph 0008). The floor tile (floor covering) is preferably a plastics floor tile, and "may be made from polyvinyl chloride, polyolefins, acrylic polymers, polycarbonate polymers or ionomeric polymers, depending on the desired end use." (Paragraph 0009). The joining film may be secured to the discrete plastic components by using a thermally labile polymeric coupling agent, allowing for heat to be applied for only 5 to 15 seconds and result in a unitary floor tile. (Paragraphs 0011 and 0013).

#### There is No Motivation or Suggestion to Combine Maurin and Fanti '081

Applicant respectfully submits that the Examiner fails to establish a *prima facie* case of obviousness because no motivation or suggestion exists to replace the non-plastic components of Maurin with the plastic components of Fanti '081 within the process of Maurin to prepare a floor tile. To establish *prima facie* obviousness, "there must be some suggestion or motivation, in the

references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine teachings." MPEP § 2143. The suggestion to make the claimed combination *must come from the prior art and not from the applicant's disclosure or from the level of skill of the art. Id.* (citing *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991)); MPEP § 2143.01 (citing *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308 (Fed. Cir. 1999)). To be motivated to combine the references, one skilled in the art, without the teaching of the Applicant's disclosure, would have to look at Maurin and Fanti '081 and determine that some benefit would result from to replace the non-plastic components of Maurin with the plastic components comprising a wear layer and a backing layer of Fanti '081 within the process of Maurin to prepare a floor tile.

Applicant respectfully submits that nothing in Maurin discusses or suggests that the use of plastic components within its disclosed methods of preparing floor tiles would provide any advantages over other methods of preparing floor tiles known in the prior art. It is respectfully submitted that Maurin cannot provide such a motivation because Maurin does not discuss, refer to, or even mention anything regarding the use of a plurality of plastics components to make floor tiles. Conversely, Maurin specifically teaches the use of non-plastics components, as Maurin is clearly directed towards the use of tiles manufactured from materials such as earthenware, ceramic, glass, aluminum, stainless steel and glazed ceramic, whereas Fanti '081 discloses tiles manufactured from plastic pieces. Accordingly, Applicant respectfully submits that one of ordinary skill would have no reason to combine Maurin with Fanti '081 because without a minimal level of teaching or discussion of the use of plastic components in Maurin,

one of ordinary skill in the art would not realize any significance of using the plastic components of Fanti '081 within the methods disclosed in Maurin. In other words, it could not be possible for one of ordinary skill to find any suggestion or motivation from the references to replace the components of Maurin with the components of Fanti '081.

Moreover, Applicant respectfully submits that the Examiner's stated motivation of combining Maurin with Fanti '081 cannot be correct, because the resulting combination would likely not result in a usable floor tile. Specifically, the method of Maurin teaches the heating of the tile components "for 18 minutes by a circulation of oil at a temperature of 180°C." (Column 4, lines 35-37). Conversely, Fanti '081 teaches the use of an electrode to melt and thereby fuse, or weld the lower layers to form a unitary tile. (Figs. 3 and 4 and column 4, lines 3-8). Applicant respectfully submits that Fanti '081 specifically discloses concerns about potential overheating and thermal damages, referencing steps taken "[i]n order to reduce problems of localized overheating in the welds" (column 3, lines 35-36) and steps taken "[t]o avoid thermal damage to the exposed upper surface of the wear layer 14 during the welding" (column 3, lines 47-48). Applicant respectfully submits that the tile compression for 18 minutes at 180°C as taught in Maurin is significantly different than the localized and presumably much quicker welding as disclosed in Fanti '081 (Fanti '081 does not appear to disclose the specific time the weld is to occur). In addition, Applicant respectfully submits that as discussed above, Maurin specifically does not disclose the use of plastic tile components, and Applicant respectfully submits that with the temperature concerns referenced in Fanti '081, Maurin likely did not

disclose the use of plastics components as those components would likely melt if used in the Maurin process.

In addition, Applicant respectfully submits that one of ordinary skill in the art would not be motivated to combine Maurin and Fanti '081 as the two references teach separate and distinct methods of joining individual tile components. Maurin, as discussed above, teaches the addition of a thermo-self-adhesive joining material and discloses the use of a support plate, and the Examiner asserts that the use of the support plate in Maurin combined with the multi-layer floor tile components taught by Fanti '081 would have been obvious. Applicant respectfully submits that this method of joining in Maurin is performed by effectively "gluing" all of the individual components to one unitary backing material, namely the support plate. Fanti '081, on the other hand and as discussed above, teaches the joining of tiles with the use of a "dielectric heating welding machine" by abutting the edges of the pieces together. Applicant respectfully submits that the method of joining individual tile components in Fanti '081 does not include the use of any backing material as backing material is not required – the individual tile components in Fanti '081 already include a white layer and a backing layer by the time they are to be joined together. Applicant respectfully submits that Maurin does not disclose, teach, or suggest that the support plate in Maurin would be applicable to the method of Fanti '081. Accordingly, Applicant respectfully submits that one skilled in the art would not be motivated to combine Maurin and Fanti '081 as these references teach significantly different methods of joining individual tiles.

Additionally, Applicant respectfully submits that Maurin discloses a method whereby spaces are left between the tiles and a "layer 6 of thermo-self-adhesive joining material fills the



spaces 4 and forms a peripheral joint 5" (column 3, lines 58-60). Fanti '081, on the other hand, relies on a method whereby the discrete plastic pieces are assembled with no spaces between them and are dielectrically welded together, with no peripheral joint. Applicant respectfully submits that the dielectric welding step of Fanti '081 is performed when two tiles are abutted against one another, and that the method of Maurin would prevent this from occurring as the thermo-self-adhesive joining material disclosed in Maurin is specifically intended to be present between the individual tiles. Applicant respectfully submits that one skilled in the art would not combine the disclosures of Maurin and Fanti '081 because they are directed towards quite different types of flooring, and such combination is inconsistent with the teachings of the references.

Accordingly, Applicant respectfully submits that no motivation or suggestion exists to combine Maurin and Fanti '081 to come up with the claimed inventions of claims 1, 2 and 11. As such, a *prima facie* case of obviousness of these claims does not exist (*see* MPEP § 2143.03), and accordingly, Applicant respectfully submits that the Examiner's rejection to claims 1, 2 and 11 under 35 U.S.C. § 103(a) is overcome and should be withdrawn.

In addition, "[i]f an independent claim is not obvious under 35 U.S.C. §103, then any claim depending therefrom is not obvious." MPEP § 2143.03 (citing *In re Fine*, 837 F.2d 1382, 1385 (C.C.P.A. 1970)). Accordingly, as Applicant believes claim 1 to be allowable for the reasons stated above, Applicant respectfully submits that claim 8, ultimately depending from claim 1, should also be allowable for reasons independent of those presented below. In

conclusion, Applicant respectfully requests that the Examiner also allow claim 8 as claim 8 ultimately depends from claim 1 which Applicant believes to be allowable.

V. **The Rejection of Claim 8 under 35 U.S.C. § 103(a) as Allegedly Being Obvious Over Maurin and Fanti '081 in View of Kauffman is Overcome**

In the Office Action, the Examiner rejected claim 8 under 35 U.S.C. § 102(b) as allegedly being obvious over Maurin and Fanti '081 in view of Kauffman. Applicant respectfully submits that the rejection of claim 8 is overcome because neither Maurin, Fanti '081 nor Kauffman disclose, teach or suggest all the limitations of claim 8. Three criteria must be met to establish a *prima facie* case of obviousness: (i) there must be some suggestion or motivation to combine the teachings of two or more prior art references; (ii) there must be a reasonable expectation of success; and (iii) "*all of the claim limitations must be taught or suggested by the prior art.*" MPEP §§ 2143 and 2143.03 (citing *In re Royka*, 490 F.2d 981 (C.C.P.A. 1974)).

Applicant respectfully submits that Maurin, Fanti '081 and Kauffman together do not disclose, teach, or suggest all of the claim limitations within claim 8 of the present Application. Specifically, the Examiner asserts that Kauffman discloses a method of manufacturing a flooring material wherein a support layer 10 is formed of a porous material (Fig. 5A), and that "it would have been obvious to a person of ordinary skill in the art to modify the method of Maurin and Fanti such that a perforated joining film is used as taught by Kauffman et al. above." (Office Action, page 4) Applicant respectfully submits that it specifically responds to this element only because, as alleged by the Examiner, "Maurin and Fanti disclose a method as stated above, but the references are silent as to a method wherein the joining film [is] porous." (Office Action, page 4).

Applicant respectfully submits that the support layer 10 is described in Kauffman as a "rigid glass reinforcement mat" (column 8, line 23) and not as including perforations as claimed in claim 8 of the Application. The Examiner also references column 5, lines 11-16 of Kauffman which states that porous backings act to retain stresses built into the thermoplastic wear layer. Nevertheless, Applicant respectfully submits that Kauffman does not appear to specifically mention a joining film provided with *perforations* as claimed in present claim 8. Applicant respectfully submits that while Kauffman discloses a mat 1 with perforations 2 (column 7, line 12), Kauffman does not disclose a support layer, as compared to a joining film of the present invention, that comprises perforations.

Accordingly, Applicant respectfully submits that Maurin, Fanti '081 and/or Kauffman, whether considered alone or in combination with each other, fail to disclose, teach, or suggest all of the limitations of claim 8. As such, a *prima facie* case of obviousness of these claims does not exist (*see* MPEP § 2143.03), and accordingly, Applicant respectfully submits that the Examiner's rejection to claim 8 under 35 U.S.C. § 103(a) is overcome and should be withdrawn.

**VI. The Objection to Claims 3-7, 9 and 10 Should be Withdrawn**

The Examiner objected to claims 3-7, 9 and 10 as being dependent upon a rejected base claim, but acknowledged that these claims would be allowable if rewritten in independent form (Office Action, page 4). Based on this conclusion, Applicant amended claims 3 and 9 to incorporate the claimed subject matter of claims 1 and 2. Accordingly, Applicant respectfully submits that amended claims 3 and 9 are now in allowable form and claims 4-7 and 10 no longer depend upon a rejected base claim but rather, now depend upon allowable claims 3 and 9. Thus,

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Applicant respectfully requests that the Examiner withdraw the objections to claims 3-7, 9 and 10 and allow claims 3-7, 9 and 10 to proceed to allowance.

**CONCLUSION**

For all the foregoing reasons, it is respectfully submitted that the Applicant has made a patentable contribution to the art and that this response places the Application in condition for allowance. Accordingly, favorable reconsideration and allowance of this Application is respectfully requested. In the event the Applicant has inadvertently overlooked the need for a payment of a fee or extension of time, the Applicant conditionally petitions therefor, and authorizes any fee deficiency to be charged to deposit account 09-0007. When doing so, please reference the above-listed docket number.

Respectfully submitted,

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